



National Weather Service Cooperative Weather Observer Program:

The Backbone of the Nation's Climate Records

More than 11,000 Cooperative Weather Observers across the United States donate more than one million hours each year to collect the weather data that becomes our national climate records. Observers also add to the stream of information that the National Weather Service uses to forecast weather, water and climate conditions, issue severe weather and flood warnings, and record the climates of the United States.

Learning from the Past to Understand the Future

National Oceanic and Atmospheric Administration scientists use climate records to study trends, and better predict climate conditions in the future. One climate condition of particular interest is the El Niño, a disruption of the ocean-atmosphere system in the Tropical Pacific that has important consequences for weather and climate around the globe. Strong El Niño conditions occurred in 1997 - 98. The accurate long-range predictions issued by the National Weather Service's Climate Prediction Center helped communities prepare for this event and mitigate its effects. Experts say that in California, this valuable information may have helped reduce losses by approximately \$1 billion.

A Rich Tradition and Invaluable Service

Present day Cooperative Observers can trace their tradition back to Colonial days. Long before a National Weather Service was established, people with a curiosity to learn more about the weather began to record their observations of the atmosphere and weather phenomena in the vicinity of their settlements.

The first known observations in the American Colonies were recorded by the Reverend John Campanius Holm, a Swedish chaplain in the Swedes Fort Colony near what is now Wilmington, Delaware. This was more than 350 years ago in 1644 and 1645.

Many famous Americans kept detailed daily weather records. We all know the fabled story of Ben Franklin flying his kite in a thunderstorm, but he contributed much more. Franklin was probably the first person to track a hurricane along the Atlantic

Coast by using a network of observers. He was Postmaster General in 1743 and was able to get weather reports from postmasters along the coast. George Washington and Thomas Jefferson also kept weather records.

Jefferson envisioned a nationwide network of weather observers as early as 1797, when he outlined a plan for providing weather instruments to someone in every county of Virginia, so that a regular statewide record might be maintained.

A plan of this kind was not established until almost 100 years later when, in 1891, the Weather Bureau was charged with the task of "taking such meteorological observations as may be necessary to establish and record the climatic conditions of the United States." In compliance with these directions, the Weather Bureau relied heavily, as it does to this day, on voluntary Cooperative Observers.

Our present day Cooperative Observers record and transmit their weather observations in much the same spirit as our early pioneers. Ed Stoll, a Nebraska farmer, was 19 years old when he began taking weather observations. He was still recording weather observations 76 years later. Stoll was invited to the White House by President Carter and chatted with the President in the Oval Office. The National Weather Service named the Cooperative Observer Award for 50 years of service after Stoll.

Ruby Stufft, another Nebraskan, became the first woman to complete 70 years of government service as a volunteer observer. She was the first recipient of a 70 year service award named in her honor. Ruby's husband volunteered to take over the duties of the weather observer for Elsmere, Nebraska, in 1920, but after a few weeks decided it was not for him. His teenage wife volunteered and continued to be the Elsmere observer well into her nineties.

Legend has it that the observer at Coushatta, Louisiana, was reading a river gauge installed on a bridge when he was struck by a passing truck. Before going to the doctor for treatment, he insisted on calling in his observation to the Weather Office.

Cooperative Weather Observers come from all walks of life; they may be farmers, ranchers, lawyers, storekeepers, ministers, teachers, construction workers, and retirees. Organizations such as radio and television stations, schools, and public utilities are also examples of places that may maintain a Cooperative Weather Station.

Cooperative Observers are dedicated and have a strong sense of duty. They are usually involved in other service-oriented endeavors in their communities. The National Oceanic and Atmospheric Administration salutes the many individuals, families, and institutions who tirelessly provide the valuable service of supplying the National Weather Service and the citizens of the United States with valuable weather information that continues to acquire greater value with time.

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